Minh Thang Cao

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Education

Carleton University   ***Ottawa, Ontario, Canada***
Bachelor of Computer Science, Co-operative Education   Sep 2019 – Mar 2024
CGPA: 11.33/12 (**A+**). On **Dean's Honour List** since 2019.

Experience

Amazon - ***Software Engineer Intern***   ***May 2023 – Aug 2023***
- Designed the architecture of an Amazon product detail page preview for complex apparel size attribute on Amazon Seller Central's 1-on-1 item creation experience
- Implemented the preview feature using React-Redux with TypeScript for front-end and Java for back-end
- Minimized incorrect input issues during product listing and reduced Amazon Retail's total listing feature friction by 3% within 2.5 million third-party sellers

Pattern - ***Software Engineer Intern***   ***May 2022 – Aug 2022***
- Developed scalable API services using Express.js + TypeScript + Docker integrated with AWS for data syncing which automates workforce recruitment and management processes (previously manual) by 90%
- Applying new design to the Flutter mobile app by creating an internal UI library with reusable widgets
- Set up automated database migration system on CI/CD pipeline with Docker and Terraform

Kinaxis - ***Software Engineer Intern***   ***Sep 2021 – Dec 2021***
- Designed and built an interactive data visualization with D3.js library on React + TypeScript environment which enhanced the ability to analyze supply chain allotment data and debug issues, assisted onboard Kinaxis's new developers by providing supply arrangement algorithm's insights

Kinaxis - ***Software Engineer Intern***   ***May 2021 – Aug 2021***
- Implemented in C++ a cycle detection graph algorithm that combines variances of strongly connected components and cycles enumeration algorithms to enhanced supply planning outputs for over 200 global enterprises
- Improved the running time of the platform in cycles detection from more than 12 hours to 1 second on a customer data set, produced high-quality and more detailed cycle data compared to the previous version

CU Blueprint - ***Volunteer Software Developer***   ***Sep 2020 – Aug 2021***
Beneficent CRM 🔗
- Produced a CRM full-stack application for non-profit organization managing interest-free loans by allowing clients and hosts tracking applications, contracts and payments using React, Node.js, Express and MongoDB
- Helped accelerate and ease the manual application screening and loan distribution, reduced the process length by 10 times, saved over $263,000 of interest

Carleton University - ***Undergraduate Research***   ***May 2020 – Aug 2020***
Closest-pair Doubling 🔗
- Explored a divide-and-conquer algorithm that calculates the closest-pair distance of points on multi-dimensional spaces without knowing coordinates using the doubling dimension definition
- Developed from scratch with C++, analyzed and proved the algorithm's logarithmic running time in practice by analyzing the output data and successfully led the original research project to a conclusion

Carleton University - ***Teaching Assistant***   ***Sep 2020 – Dec 2023***
- Participated in weekly tutorial sections and office hours to help professors guide over 100 students through courses' materials, evaluated student work, provided detailed feedback and addressed inquiries
- Courses: CS Intro (Java), Web Development (JavaScript, Node, Express, MongoDB), Robotics (Java, Webots)

Skills

Languages: Python, JavaScript, TypeScript, Java, C/C++, HTML, SQL, Kotlin
Technologies: React, Redux, Node.js, Express.js, Flask, Sring, CSS, MongoDB, Firebase, WebSockets, React Native, Flutter, Docker, Git, Linux, AWS